

CLAIMS

1. A one-piece screw terminal, characterized by the fact that it is made of a copper alloy based on Cu, Ni, and Si.

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2. A screw terminal according to claim 1, characterized by the fact that it has a copper percentage of about 97%.

3. A screw terminal according to claim 1 or claim 2,
10 characterized by the fact that it has a nickel percentage lying in the range 2% to 5%.

4. A screw terminal according to any one of claims 1 to 3, characterized by the fact that it has a nickel
15 percentage of about 2.5%.

5. A screw terminal according to any one of claims 1 to 4, characterized by the fact that it has a silicon percentage lying in the range 0.3% to 1%.

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6. A screw terminal according to any one of claims 1 to 5, characterized by the fact that it has a silicon percentage of about 0.5%.

25 7. A screw terminal according to any one of claims 1 to 6, characterized by the fact the top surface (18) of a flared head (16) of the screw is plane or slightly rounded with a convex shape, and is preferably smooth.

30 8. A method of manufacturing a screw terminal in accordance with any one of claims 1 to 7, the method being characterized by the fact that it comprises the steps consisting in wire-drawing a round wire of copper, nickel, and silicon, performing at least one forging
35 operation, followed by heat treatment.

9. A method according to claim 8, characterized by the fact that the forging step consists in cold forging, preferably using two strokes.

- 5 10. A method according to claim 8 or claim 9, characterized by the fact that the heat treatment step comprises maintaining a temperature of about 475°C for a duration of about two hours, followed by rapid cooling.